Amendments to the Specification:

Page 1, after the title, please insert the following heading:

Background of the Invention

Page 1, line 17, (after the third paragraph) please insert the following heading:

Summary of the Invention

Page 9, line 18, (after the second paragraph) insert the following heading:

Brief Description of the Drawings

Page 8, line 27, insert the following heading:

Detailed Description

Page 10, please replace the paragraph starting at line 29 and continuing to page 11, line 2 with the following paragraph:

The device 14, receiving the BW_enable and WFQ_enable signals from the shapers~~schedulers~~, will determine which device (that is, which queue) is to transmit data when a present data packet has been transmitted. This determination is performed after the priority of 8W 0, 8W 1, .. SW 7, WFQ 0, WFO 1, ... WFQ 7. Thus, data is always transmitted under the guaranteed bandwidth if the schedulers 10 have such data to transmit. Otherwise, data (if present) is transmitted from the Weighted Fair Oueueing process. Please note that the priority between the WFQ queues is not relevant in that only one thereof can have the WFQ_enable signal on.

Page 11, please replace the text starting at line 20 and continuing to the end of page 12 with the following text:

ScanAllQueues

Prepare next loop 213

Invalidate WFQ candidate register

Invalidate normalizing offset minimizer register

for (0..max_queue) 215

ScanSingleQueue(#) 217

end for 219

Analyze scanning result 221

if (No WFQ candidate already pending) AND

(WFQ Candidate is operationally enabled — member of the second group)

then

Enable WFQ candidate

Set normalizer offset to mm value from scanning

end if

return;

*): or maybe alternatively the number of bits/bytes transmitted

The inner loop is as follows:

ScanSingleQueue(#)

Monitor scheduler BW activity ~~(Step I)~~ 313

// Increase bucket level if transmission is active

if (transmission active) then

bucket level := bucket level + 1.0 *)

end if

bucket level := bucket level - configured drop rate

// Limit bucket level at zero to avoid negative level

if (bucket level negative) then bucket level := 0

Monitor scheduler WFQ activity ~~(Step II)~~ 315

```
        // Rearm departure timer if transmission is active
        if (Scheduler is transmitting in a WFQ slot) then
            // Time slot utilized for this queue
            Departure time delay := current dep. delay + weight
            end if
        end if

Enable BW candidates ~~(Step III)~~ 317
        if (data in queue) AND (bucket level below threshold) then
            Enable BW indication line // *)
        end if

Enable WFQ candidates ~~(Step IV)~~ 319
```

Page 13, please replace the paragraphs starting at line 24 and continuing to line 31 with the following paragraphs:

In each time slot of the process, each of the queues is scanned as illustrated in Fig. 3 where the Leaky Bucket level is adjusted ~~(Step I)~~ step 313 according to the drop rate of the bucket and taking into account whether the ~~scheduler~~ device 14 is transmitting a data packet (in accordance with the Leaky Bucket process) from that actual queue. The resulting bucket level or number is compared to the bucket threshold and the SW_enable signal set accordingly ~~(Step III)~~step 319.

The Weighted Fair Queuing (WFQ) is handled by ~~Steps II and IV~~ step 315 and 319 and works as follows:

Page 14, please replace the paragraphs starting at line 5 and continuing to line 16 with the following paragraphs:

For each queue wishing to transmit over the WFQ channel, a Departure time delay is calculated. The Departure time delays of the queues define which of the queues is to be the next

to use the WFQ channel. These delays are initially assigned a value corresponding to the weight of the queue and when a queue transmits a WFQ data packet over the medium 16, the pertaining delay is added to the weight each time slot where the queue is transmitting the data packet ~~(Step II)~~ 315. An alternative process would be one where the weight is added each time a predetermined number of bits or bytes has been transmitted from the queue.

In this manner, the transmitting queue obtains a new delay with a higher number. After that, it is to be determined which queue is to transmit the next time - the queue now having the lowest delay ~~(Step IV)~~ 319.

Page 15, please replace the paragraph starting at line 22 and continuing to line 27 with the following paragraph:

Now, the ~~scheduler~~ device 14, when determining from which queue a next data packet is to be transferred to the medium 16, firstly checks whether a queue wishes to send a LB packet - that is, if a queue wishes to use bandwidth reserved to it. If this is not the case, the WFQ channel is available, and the next queue is chosen to be that having the smallest delay. If the LB channel is used, the WFQ channel - and all delays thereof - will remain unchanged.

Page 14, please replace the paragraphs starting at line 5 and continuing to line 16 with the following paragraphs:

Also, it is evident that data is only transmitted over the WFQ channel when the ~~scheduler~~ device 14 determines that there is available bandwidth on the medium 16.

Page 27, the Abstract, please change the heading as follows:

~~SUMMARY~~ Abstract of the Disclosure